

**REMARKS**

This amendment is prepared in response to the Final Office action (Paper No. 20061011) mailed on 16 October 2006. Upon entry of this amendment, claims 21 through 24 will be pending. Applicant has canceled claims 1 through 6, 8 through 9 and 11 through 20 without prejudice or disclaimer as to their subject matter and amended claims 21 through 24 by this amendment.

On Pages 7 through 10 of Paper No. 20061011, the Examiner deemed claims 21 through 24 to be allowable. Applicant is relying on this and is amending claims 21 through 24 to place each of these claims in independent form by this amendment while canceling all other claims. Applicant therefore expects an instant Notice of Allowance as a result of filing this amendment.

Although Applicant has canceled the non-allowed claims, Applicant still disagrees with the Examiner's claim rejections in Paper No. 20061011. Therefore, Applicant would like to enter into the record why Applicant disagrees with the rejection of the canceled claims.

**Rejection of claims 1-6, 8, 9 and 11 through 20 under 35 U.S.C. §103(a)**

Claims 1-6, 8, 9 and 11 through 20 have again been rejected in Paper No. 20061011 under 35 U.S.C. §103(a) as being unpatentable over Ichimura (US Pub 2002/0149906) in

view of Matsuoka *et al.* (US 6,104,451). Applicant has the following comments:

Applicant's invention pertains to a display device having a display panel displaying images, a base of a chassis mounted on a back of the display panel to support the display panel, and circuit components and a printed circuit board mounted on a back of the base of the chassis that generate heat during the operation of the display. The chassis also has a flange at a top portion of the base to prevent the base and the display panel from bending. Applicant perforates this flange with holes to allow hot air generated from the printed circuit board on the back of the chassis to easily flow upward and out without being trapped or obstructed by the flange. These holes are non-obvious as they, 1) the holes are formed on a structure ordinarily not considered to be perforated by holes, 2) have holes formed only on the flange and not on the base of the chassis and 3) ordinarily have a tendency to weaken a part designed to provide strength to the display panel.

In the rejection of claims 1 through 20 in Paper No. 20061011, the Examiner relies Ichimura for an alleged teaching of a display having a chassis 44 that supports a display panel and allegedly having a flange and a reinforcing rib. On Page 5 of Paper No. 20061011, the Examiner reproduces a blown up portion of FIG. 2 of Ichimura and points to the portion of the chassis 44 of Ichimura that the Examiner deems to be the flange of the chassis and the portion that the Examiner deems to be the reinforcing rib. On Page 5 of Paper No. 20061011, the reinforcing rib of Ichimura is illustrated as being at the top of the display on an edge

portion of chassis 44 that joins with MB shield 48. The Examiner admits that Ichimura fails to teach holes in the flange of the chassis and therefore turns to Matsuoka for a teaching of the holes. In Matsuoka, the holes the Examiner refers to are ventilation holes that perforate an enclosure 230 for a display and do not perforate a structure that supports the display panel such as a chassis. From this, the Examiner rationalizes that the combined teachings of Ichimura and Matsuoka would teach Applicant's claimed invention of a perforated flange of a chassis that supports the display panel. Applicant disagrees.

Applicant submits that enclosure 230 of Matusoka is not a chassis that supports a display panel as in Ichimura and in Applicant's claimed invention. Further, Applicant submits that enclosure 230 of Matsuoka does not have circuit components mounted thereon as in Ichimura and in Applicant's claimed chassis. Further, Applicant submits that enclosure 230 is perforated by ventilation holes all over the part, not just on a flange of the enclosure. Because of all of these differences between enclosure 230 of Matsuoka and a chassis for a display panel, Applicant submits that the combined teachings of Ichimura and Matsuoka would not result in ventilation holes perforating the flange portion of the chassis 44 of Ichimura. Applicant submits that it would not be obvious from Matsuoka to precisely target the only the tiny flange of Ichimura to be perforated by holes. Applicant submits that the Examiner, in Paper No. 20061011, is attempting to conduct improper hindsight reconstruction by using Applicant's claims as a blueprint to conclude that the enclosure 230 of Matsuoka would teach perforating the tiny flange of chassis 44 of Ichimura with

ventilation holes.

Applicant submits that it is the essence of Applicant's entire invention to perforate the flange of the chassis that supports both the back of the display panel and the circuit components with ventilation holes. This is where the novelty lies. Applicant submits that Paper No. 20061011 has no direct evidence or no direct teaching of any comparable structure. Applicant submits that it is a total lack of respect for Applicant's novel concept to reject it by merely showing some unrelated enclosure part perforated by ventilation holes and then showing a chassis with a flange and then saying since the enclosure part has holes in it, it would be obvious to infer that a flange of a chassis supporting a display panel and supporting circuits can also have holes.

Unlike an enclosure, a chassis base is not an obvious candidate for holes as 1) it supports a display panel, 2) draws heat away from the display panel while 3) has heat producing circuits mounted thereon, 4) does not ordinarily serve to totally enclose these heat producing circuit elements. Because of these differences between an enclosure for a display and a chassis base, Applicant submits that it would not be mere obviousness to say that a flange of a chassis base can have holes just because an enclosure does.

Applicant further submits that unlike Applicant's FIG. 3 for example, the flange portion of chassis 44 of FIG. 2 of Ichimura is 1) extremely tiny and 2) displaced a substantial

horizontal distance from the printed circuit board 46. Because the flange in chassis 44 of Ichimura is so tiny and does not extend above the printed circuit board 46, Applicant further submits that it would not be obvious to perforate this tiny flange of chassis 44 of Ichimura with holes. This is because doing would have very little improvement in the heat dissipating performance of the device and would weaken the chassis substantially.

As is clear from FIG. 2 of Ichimura, the heat producing printed circuit board 46 is significantly displaced in a horizontal direction a significant distance from the flange of chassis 44. Because of this, hot air rising from printed circuit board 46 of FIG. 2 of Ichimura would not significantly be obstructed by this flange. Because of the large horizontal displacement of the heat producing printed circuit board 46 from the flange of chassis 44 of FIG. 2 of Ichimura, Applicant submits that it would not be obvious to perforate holes in this flange as it would do very little to allow hot air to escape. Because flange of chassis 44 is so far removed from heat producing printed circuit board 46, Applicant submits that it would not be obvious to anyone to punch holes in this flange.

As is also clear from FIG. 2 of Ichimura, the flanged portion of chassis 44 is extremely tiny. It is so tiny that the Examiner had to blow up FIG. 2 of Ichimura considerably on pages 3 and 5 of Paper No. 20061011 to identify exactly what parts of it was the flange and what parts of it was the reinforcing rib. Because this flange in Ichimura is so tiny, Applicant submits that punching ventilation holes in this flange would have little to no effect in

providing better ventilation for produced hot air. Because the possible positive effects of perforating the flange of chassis 44 of Ichimura are so small to non-existent, and because such a perforation would significantly structurally weaken the flange and the entire chassis 44 of Ichimura, Applicant submits that it would not be obvious to perforate the flange of chassis 44 of Ichimura with holes to arrive at Applicant's invention.

**Regarding Applicant's claims 1 and 11,** Applicant claims, "a flange ... adapted to prevent the base from bending". On Page 3 of Paper No. 20061011, the Examiner states that this is taught by the flange arrangement in chassis 44 of Ichimura. Applicant disagrees. Applicant submits that the portions of chassis 44 of Ichimura that the Examiner deems to be the flange and the reinforcing rib do not serve to provide strength to the base of chassis 44 but instead are present merely for attachment purposes to the MB shield 48. In FIG. 2 of Ichimura, the reinforcing rib portion (i.e, the portion of chassis 44 that the Examiner deems to be the reinforcing rib) of chassis 44 is much wider and larger than the tiny flange. Applicant submits that with this arrangement of having a tiny flange and having a very large reinforcing rib, the large reinforcing rib is likely to weaken the flange and to weaken the entire chassis 44 as opposed to providing additional strength to it. Such a rib would be easy to bend or break off. This is because the reinforcing rib of the chassis 44 of Ichimura is much larger than the flange, and extends in an opposite direction from that of the base. Because of this, Applicant submits that the flange of chassis 44 of Ichimura does not serve to prevent the base from bending. Therefore, the rejection of Applicant's claims 1 and 11

is without merit.

**Regarding Applicant's claims 6, 19 and 20,** Applicant claims a reinforcing rib. In Paper No. 20061011, the Examiner states that this is taught by Ichimura. In particular, the Examiner, on Page 4 of Paper No. 20061011 shows a blown up view of the portion of chassis 44 of Ichimura that the Examiner deems to be the reinforcing rib, and this being the portion of chassis 44 that attaches to MB shield 48. Applicant disagrees. Applicant submits that the portion of chassis 44 of Ichimura that is attached to MB shield 48 does not provide reinforcement to either the flange or the base of chassis 44 and thus can not be considered to be a "reinforcing rib". This is because with the arrangement of FIG. 2 of Ichimura, the reinforcing rib is much larger than the tiny flange and the reinforcing rib extends in a direction opposite to that of the base and not parallel to the base. Applicant submits that with this arrangement, the flange and the reinforcing rib are somewhat delicate and do not provide reinforcing properties to the chassis or the flange. Applicant further submits that these portions of the chassis 44 of Ichimura that the Examiner relies on for a teaching of a flange and a reinforcing rib are present in Ichimura merely to provide an attaching surface to the MB shield 48, and are not in any way present to provide extra strength to the base of the chassis. Because chassis 44 of Ichimura does not properly have a reinforcing rib, the rejection of claims 6, 19 and 20 are without merit.

**Regarding Applicant's claims 4 and 5,** Applicant claims the shape of the holes in

the flange of the chassis as being elliptical and rectangular. In Paper No. 20061011, the Examiner dismisses these hole shapes as mere design consideration for one skilled in the art. Applicant disagrees. Applicant submits the mere fact that Applicant perforates a flange of a part used to support a display and circuit components is entirely novel and thus new considerations have to be considered, such as described in Applicant's paragraph 0024.


A fee of \$200 is incurred by the filing of this amendment for the addition of one (1) independent claim in excess of 3. Applicant's check drawn to the order of Commissioner accompanies this Amendment. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.



In view of the above, it is submitted that all of the claims now present in the application are patentable over the cited references, taken either alone or combination and accordingly should now be in a conditions suitable for allowance.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested.

Respectfully submitted,

  
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